## **SECTION 2. SUMMARY AND CERTIFICATION**

A. 510(k) Summary

Submitter:

SIGNUS Medical LLC 6713 Lakeway Drive Chanhassen, MN 55317

**Contact Person:** 

Mr. Thomas Hoghaug Signus Medical LLC 6713 Lakeway Drive Chanhassen, MN 55317

Date Prepared:

February 4, 2003

Trade Name:

**Classification Name:** 

TETRIS™ Spinal Implant
Vertebral Body Replacement

and Number:

Class II, 21 CFR 888.3060

**Product Code:** 

**MQP** 

**Predicate Device(s):** 

The TETRIS<sup>TM</sup> Spinal Implant is substantially equivalent to the Stackable Cage<sup>TM</sup> System, manufactured by DePuy AcroMed (K001340 and K990148) and the Surgical Titanium Mesh<sup>TM</sup> System, manufactured by DePuy

AcroMed (K003043).

**Device Description:** 

The TETRIS<sup>TM</sup> Spinal Implant is a hollow, rectangular frame with lateral fenestrations. The upper and lower aspects of the implants are open and the walls feature spikes, which assist in the positive anchorage and seating of the implants between the superior and inferior vertebral bodies. The frame is forged from a titanium alloy

(Ti6Al4V).

K022793

The TETRIS<sup>TM</sup> Spinal Implant is available in a variety of sizes and a wedge shaped option. This enables the surgeon to choose the size suited to the individual pathology and anatomical condition. The TETRIS<sup>TM</sup> may be used individually or paired based on anatomy and amount of bone resected by the surgeon. When using two implants, care should be taken not to mix flat and wedged shaped devices.

**Intended Use:** 

The TETRIS™ Spinal Implant is indicated for use to replace a vertebral body that has been resected or excised due to tumor or trauma/fracture. The device is intended for use as a vertebral body replacement in the thoracolumbar spine (from T1 to L5).

The TETRIS™ Spinal Implant is intended for use with supplemental internal fixation. The supplemental internal fixations systems that may be used with the TETRIS™ Spinal Implant include, but are not limited to, DePuy AcroMed titanium plate or rod systems (Kaneda SR, University Plate, M-2, ISOLA, VSP, Moss, TiMX, and Profile).

**Functional and Safety Testing** 

Functional and safety testing of the TETRIS™ Spinal Implant consisted of mechanical testing in accordance with the "Guidance for Industry and FDA staff, Guidance for Spinal System 510(k)s. The results of the examination and testing were successful and did not raise any issues of safety and effectiveness of the device.

Conclusion:

The TETRIS™ Spinal Implant is substantially equivalent to the Stackable Cage™ System (K001340 and K990148), manufactured by DePuy AcroMed and the Surgical Titanium Mesh™ System, manufactured by DePuy AcroMed (K003043) based on the device's similarities in materials, functional design and indications for use.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

APR 0 8 2003

Mr. Thomas Hoghaug SIGNUS Medical LLC 6713 Lakeway Drive Chanhassen, MN 55317

Re: K022793

Trade Name: TETRIS<sup>™</sup> Spinal Implant Regulation Number: 21 CFR 888.3060

Regulation Name: Spinal intervertebral body fixation orthosis

Regulatory Class: II Product Code: MQP

Dated: February 4 and 7, 2003 Received: February 7 and 10, 2003

Dear Mr. Hoghaug:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, 'market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-\_\_. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,

Celia M. Witten, Ph.D., M.D

Director

Division of General, Restorative and Neurological Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

## **Indications for Use Page**

**Device Name:** TETRIS™ Spinal Implant

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Division Sign-Off)

Division of General, Restorative

K022793

and Neurological Devices

510(k) Number\_